

Claims

1. A new and distinct genotype of *Artemisia annua* 'CIM-Arogya', developed through marker assisted breeding, possessing the following combination of characters:

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| 5 | - Genus | <i>Artemisia</i> |
| | - Species | <i>annua</i> |
| | - Family | Asteraecae |
| | - Common name | Qinghao |
| | - Plant height | 280-305 cm |
| 10 | - Plant canopy | Oval |
| | - Growth habit | Erect |
| | -Branching | sympodial branching pattern |
| 15 | -Stem: | ingle, round hard woody green (137D)
Stem width 5-12 cm (app) |
| | - Number of Branches:- | |
| 20 | -primary branches: | -55-65 |
| | -Secondary branches per primary branch: | -50-60- |
| | -Tertiary branches per secondary branch: | -37-45 |
| | -Range of length of Internodes | |
| 25 | -Main stem – | 4-6cm at bottom, 10-12cm at middle, 2-5 cm at the top |
| | -Primary branch | 2-5 cm at bottom, 8-11 cm at middle, 2-4 cm at the top |
| | -Secondary branch | 8-11 cm at the bottom, 5-7 cm at the middle, 1-3 cm at the top |
| | -Tertiary branch | 3-5 cm at the bottom, 1-3cm at the middle, 0.5-1.5 cm at the |
| 30 | top | |
| | -Leaf- | Green (137 B) |
| | -Texture- | Thin and flexible |
| | -Surface – | Smooth non pubescent |
| 35 | -Shape- | Pinnately compound leaf |
| | -Margin- | Pinnetisected |
| | -Tip- | Acute |
| | -Petiol length- | 2.5-3.50 cm |
| | -Lamina length- | 5-7cm |
| 40 | -Lamina width- | 4-5cm |
| | -Inflorescence- | Capitulum (head) |
| | -Flower- | Arranged in whorls. Colour yellow group (7A) |
| | -Two types of flowers | Disc florets and Ray florets. |
| 45 | -Disc florets are bisexual and ray florets are unisexual (female) | |
| | -Colour | Greenish yellow 2-3mm in diameter |
| | -Receptacles | Glabrous |

- Calyx Bracteates
- Corolla Sympelalous, tubular top split in to 5 lobes in Disc florets and 2-3 lobes in Ray florets (legulate)
- 5 -Androecium 5 stamens, Anther lobes are fused and filaments are free
- Colour Yellowish
- Gynoecium Unilocular, inferior bifid stigma.
- Colour yellowish
- 10 -Time of flowering- 198 days.
- Seed setting 240 days (app)
- Artemisinin content 0.9 to 1.1%
- Artemesinic acid 0.002- 0.004%
- Oil content 0.35-0.45%
- 15 -alternate deeply dissected aromatic leaves ranging between 2.5 to 5.0 cm in length.
- tiny yellow nodding flowers (capitula)
- capitula in loose panicle containing numerous central bisexual florets and marginal pistillate florets
- receptacle is glabrous
- 20 -florets and receptacle bear abundant 10-celled biseriate trichomes
- globular canopy
- dry leaf yield of about 50 Q per hectare
- flowers (7A) arranged in a head or Capitulum.